Access DB# 91043

# SEARCH REQUEST FORM

# Scientific and Technical Information Center

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Title of Invention: Universal Coupler for Spinal Firstion			
	inventors (please provide full names): Charles A. Finn		
Earliest Priority Filing Date:			
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	STAFF USE ONLY	Type of Search	Vendors and cost where applicable
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	Date Searcher Picked Up: 4-8-03	Bibliographic	Dr.Link
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	Cooling Time:	Other	Other (annual A)

PTO-1590 (8-01)

# UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

#### 5474551

### December 12, 1995

# Universal coupler for spinal fixation

REISSUE: Reissue Application filed Dec. 11, 1997 (O.G. Feb. 24, 1998) Ex. Gp.: 3309; Re. S.N. 08/988,331, (O.G. February 24, 1998)

APPL-NO: 342226 (08)

FILED-DATE: November 18, 1994

GRANTED-DATE: December 12, 1995

## **ENGLISH-ABST:**

A spinal rod coupler assembly providing four degrees of freedom for connecting a spinal rod to a vertebrae of a patient which includes a tubular coupler member, an eyebolt, an insert and a set screw. The coupler member has a longitudinal bore, a central axis, and an end portion that is open ended and internally threaded and a second end portion that is closed. A plurality of openings in the tubular coupler member that includes a first pair of openings intersecting the central axis of the bore at generally right angles and a second pair of openings intersecting the central axis of the bore at generally right angles. The first and second pairs of openings being perpendicular to each other. The first pair of openings are sized and shaped to receive a spinal rod. The eyebolt has a shank portion and an eye portion, with the shank portion being insertable through the second pair of openings of the coupler body. The eye portion has an opening sized and shaped to mate with a selected bone bolt or bone screw. The insert fits within the bore and has opposed, arc-shaped end portions with recesses for engaging the spinal rod and eyebolt member. The set screw threadably engages the internally threaded end portion of the bore and tightens the assembly of the rod, insert, and eyebolt within the coupler member.

#### Selected file: PLUSPAT

#### \*\* SS 1: Results 1

1 / 1 PLUSPAT - @QUESTEL-ORBIT - image US5474551 A 19951212 [US5474551] PN (A) Universal coupler for spinal fixation ΤI PA (A) SMITH & NEPHEW RICHARDS INC (US) PA0 -Smith & Nephew Richards, Inc., Memphis TN [US] (A) FINN CHARLES A (US); SHERMAN SCOTT (US) IN -AP -US34222694 19941118 [1994US-0342226] US34222694 19941118 [1994US-0342226] PR -IC -(A) A61B-017/70 A61B-017/86 EC -A61B-017/70B6 PCL -ORIGINAL (O): 606061000; CROSS-REFERENCE (X): 606073000 DT -Basic CT -US4569338; US4648388; US4771767; US5024213; US5053034; US5129900; US5176679; US5306275; US5344422; US5437669; WO9423661 STG -(A) United States patent AB

A spinal rod coupler assembly providing four degrees of freedom for connecting a spinal rod to a vertebrae of a patient which includes a tubular coupler member, an eyebolt, an insert and a set screw. The coupler member has a longitudinal bore, a central axis, and an end portion that is open ended and internally threaded and a second end portion that is closed. A plurality of openings in the tubular coupler member that includes a first pair of openings intersecting the central axis of the bore at generally right angles and a second pair of openings intersecting the central axis of the bore at generally right angles. The first and second pairs of openings being perpendicular to each other. The first pair of openings are sized and shaped to receive a spinal rod. The eyebolt has a shank portion and an eye portion, with the shank portion being insertable through the second pair of openings of the coupler body. The eye portion has an opening sized and shaped to mate with a selected bone bolt or bone screw. The insert fits within the bore and has opposed, arc-shaped end portions with recesses for engaging the spinal rod and eyebolt member. The set screw threadably engages the internally threaded end portion of the bore and tightens the assembly of the rod, insert, and eyebolt within the coupler member.

> 19950911 US/AS02 ASSIGNMENT OF ASSIGNOR'S INTEREST SMITH & NEPHEW RICHARDS, INC. 1450 BROOKS ROAD MEMPHIS, TENNESSEE 38116 \* SHERMAN, SCOTT : 19941212

19951212 US/A PATENT

19980224 US/RF REISSUE APPLICATION FILED 971211 1999-20

**UP** - 1999-20

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5,474,551 A 19951212 [US5474551] PN -

PA -Smith & Nephew Richards Inc 19971211 REISSUE REQUESTED ACT -ISSUE DATE OF O.G.: 19980224 REISSUE REQUEST NUMBER: 08/988331

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3309

#### Reissue Patent Number:

20020828 REASSIGNED MERGER

Assignor: SURGICAL DYNAMICS INC. DATE SIGNED: 07/01/2002

Assignee: HOWMEDICA OSTEONICS CORP. 59 ROUTE 17 ALLENDALE NEW

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Reel 013193/Frame 0337

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Selected file: INPADOC

# \*\* SS 1: Results 1

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TI -UNIVERSAL COUPLER FOR SPINAL FIXATION

IN ~ FINN CHARLES A [US]; SHERMAN SCOTT [US]

PA -SMITH & NEPHEW RICHARDS INC [US]

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APPLICATION DATA (PATENT)

US 342226/94 19941118 [1994US-0342226]

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19951212 US/A

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REISSUE APPLICATION FILED

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